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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/339,963	06/25/1999	ANDREAS V. BECHTOLSHEIM		3287

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EXAMINER

HOANG, THAI D

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/339,963

Applicant(s)

BECHTOLSHEIM ET AL. *VB*

Examiner

Thai D Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-65 is/are allowed.
- 6) ☒ Claim(s) 1-9, 22-23 and 66-72 is/are rejected.
- 7) ☒ Claim(s) 10-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3 and 68 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification (pages 9 and 15-16) does not provide any detailed description to show how the system operate if a header includes declaration fields for at least (emphasis added) one of BPDU, PRIORITY, VLAN_ID, and an application specific field as disclosed in claims 3 and 68.

Claims 4-8 and 69-72 are rejected because they are depended on rejected claims 3 and 68 respectively.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2 and 66-67 are rejected under 35 U.S.C. 102(e) as being unpatentable over Garcia, U.S patent No. 6,363,078 B1.

Regarding claims 1 and 66, Garcia discloses a path verification unit that interfaces telecommunications media to a switching matrix. Garcia discloses that the method comprises a first step of sending IDLE symbols until a synchronization time has passed (col. 9, line 27-col. 10, line 31); a second step of sending a variable length packet which comprises a header, payload and CRC (FCS) fields, wherein the header includes a payload type field (PTI field, figures 7-10); Furthermore, Garcia method comprises a third step of sending IDLE symbols if the next packet is not ready to transmit, or returning to the second step if the next packet is ready to transmit (col. 24, lines 53-64.)

Regarding claims 2 and 67, as best understood, Garcia discloses that the system supports both synchronous transfer mode (STM) and integrated packet layer (iPL), therefore, the TYPE field identifies the payload format such as Ethernet packets, native IP packets, ATM cells (col. 4, line 5-col. 5, line 9; col. 10, lines 46-53.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia in view of Finney et al U.S patent No. 5,570,356.

Regarding claim 9, Garcia discloses that the system transmits the header, payload, and stop symbol. Garcia does not teach that the header, payload, and stop symbol are carried in a plurality n of data lanes of the system. However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes (abstract, col. 2, lines 23-38, figures 1-3 and 6.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system in order to speed up the packet transmission in the network.

Regarding claim 22, Garcia does not teach that the system comprises n data lanes to transmit the header and the variable payload of the packet. However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes. The data is encoded and transmitted in a sequence by encode and serialize unit (fig. 1, elements 116-120.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system for the same reason as mentioned in claim 9.

Regarding claim 23, Garcia's method inherently comprises the steps of sending the header first, that includes a start symbol, then sending the payload data, and stop symbol. Garcia does not teach that the start symbol is transmitted on a first data lane, and the payload data is followed by a stop symbol is transmitted on at least one data lane. However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system for the same reason as mentioned in claim 9.

Response to Arguments

Applicants' arguments filed on 16 December 2002 have been fully considered but they are not persuasive.

Examiner believes that the remarks, from page 20, line 8 to page 23, line 13 are not relevant because it is directed to subject matter not found in the claims.

Also, on page 23, from line 15, Applicants argue that the reference does not teach a system for transmitting variable length data. Examiner respectfully disagrees. Applicants are directed to figures 5, 6 and 8, where reference teaches that the system transmits different size of frames. Therefore, it implies that the system could be able to

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transmit variable length packets. Furthermore, pages 23-24, Applicants argue that Finney (secondary reference) does not teach start or end of frame and other features. Since Examiner uses Finney's invention as a secondary reference; therefore, the secondary reference is not required to meet all of the features as disclosed in the specification of the application. Also, Examiner believes that other arguments, which relate to the secondary reference, are not relevant because it is directed to subject matter not found in the claims.

Allowable Subject Matter

Claims 10-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-30 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or fairly suggest the following:

A communication interface comprising n data lanes, the interface sequentially transmitting a header distributed across a plurality of the data lanes, a variable amount of payload data distributed across a plurality of the n data lanes; the header includes transmitting a START symbol on first the data lane, and the transmission of the payload data is followed by an END symbol on at least one the data lane; the payload data includes transmitting data across the n data lanes up to data lane m , where $m \leq n$.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang
March 8, 2003


HASSAN KIZOU
CUSTOMER SERVICE PATENT EXAMINER
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